

2018 Broccoli and Carrot Trials

Williamson County Master Gardeners Vegetable Demo Garden

Sept 14 - We prepared the beds with compost, Cotton seed meal, and molasses. We broad forked both beds and then raked them smooth, it rained over the weekend.

Sept 18 - We raked the beds. In trial bed B we planted two rows of Scarlet Nantes in the center and two rows of Danvers Half Long on the outside using the Earthway Planter. The bed was hand watered by hose and three drip irrigation lines were set up. The rows were labeled on the south side.

In trial bed A broccoli plants were planted in four 4'x6' sections of the bed. Each of the middle sections have one the three varieties (Arcadia, Packman, Gypsy), eight plants per section. The variety planted in each section was labeled. The northern most section has three of each variety for a total of 11 plants of each. Each plant was watered in with Sea Tea and Fish Emulsion.

The southernmost fifth section had been deep dug and screened. This section was broadcast planted with mixed carrots (Calliope Blend, Burpee Kaleidoscope Blend, Burpee A#1 hybrid, and Atomic Red). The whole bed was hand watered by hose.



Earthway Planter



Broccoli bed A



Carrot bed B

Sept 19 – The plantings were hand watered with harvested rainwater. A few cabbage looper caterpillars were hand picked.

Sept 21 – Trial bed A was enclosed in chicken wire and the broccoli were sprayed with BT.

Sept 28 – Carrots have germinated. Trial Bed B was enclosed in chicken wire.

Oct 2 – The Carrots have their first true leaves. One broccoli may be broken at the ground and will need replacement.



Broccoli Bed A



Carrots Bed B



1st true leaves on carrots

Oct 5 – Four Gypsy and one Arcadia Broccoli have declined, probably damaged by cutworms. The Arcadia was replaced with a new plant. There is some cabbage looper damage as well so the bed was treated with Slugo Plus and the plants sprayed with BT. The carrots were hand watered with a hose.



Replaced one Arcadia Broccoli

Four Gypsy not thriving

Oct 9 – The four Gypsy Broccoli lost to cutworms have been replaced with new plants (21 days later) and all the broccoli sprayed with BT. Carrot tops are missing in scattered spots and we assume that is also cutworm damage. The carrots have been sprayed with BT and additional fence pins have been added just in case the rabbits are the culprit.



Broccoli Bed A

Four Gypsy replacements

Carrot Bed B



Damage to some Carrot tops

Oct 12 – Fertilized with Sea Tea and Molasses, weeded beds.



Broccoli Bed A



Carrot Bed B

Oct 16 & 19 – week with heavy rain and cool temps

Oct 20 – checked on Beds on Saturday



Broccoli Bed A

Carrot Bed B

Mixed Carrots in Bed A

Oct 26 -Carrots in Trial Bed B were thinned to about 1" apart. The beds were weeded and inspected for pests. One small cut worm was found in the carrots.



Broccoli Bed A

Carrot Bed B

Mixed Carrots and
replacement Broccoli

Oct 30 – Thinned mixed Carrots. Fed Fish Emulsion, Sea Weed, and Molasses to Broccoli and Carrots. Cleaned up old spent leaves from broccoli.



Broccoli Bed A

Carrot Bed B

Nov 2 – Packman Broccoli has formed small heads. Weeded and thinned the Carrots. Some Carrots are wilted, some seemed cut off, maybe cutworms again so treated Bed B with Slugo Plus. Some Brassicas in other beds showed cabbage lopper damage so all Brassicas in the garden were treated with BT.



Broccoli Bed A

Carrot Bed B

Wilted Carrots



Mixed Carrots in Bed A

Nov 6 – Broccoli and Carrots fed with SeaTea.



Broccoli Bed A



Broccoli Head



Carrot Bed B

Nov 9 – Heavy rain previous day preparing for a freeze. Sea-Tea on Broccoli and Carrots.



Broccoli Bed A

Carrot Bed B

Nov 13 – high winds and a hard freeze (25 degrees) work day cancelled.

Nov 16 – The broccoli suffered some wind and freeze damage to the outer leaves especially on the north side of the bed. The replacement Gypsy plants were flattened to the ground. The carrots appear unaffected.



Broccoli Bed A

Carrot Bed B

Nov20 – Some of the Arcadia Broccoli have not set heads yet, Gypsy seems to have suffered the most from the freeze. Both Broccoli and Carrots were given some Sea-Tea by Sonia and Judy.



Broccoli Bed A

Carrots Bed B

Nov 27 – Another light frost, cleaned up some damaged leaves from the broccoli. Harvested five Packman broccoli heads (5.5# 70 days from transplant). Gypsy suffered the most from the previous freeze and Arcadia the least. Packman is the quickest to harvest, Arcadia is just starting to make heads now. The weather is predicted to be warm and sunny so we should see lots of growth this week.



Broccoli Bed A



Carrots Bed B



Mixed Carrots Bed A



Five Packman Broccoli Heads

Nov 30 – Harvested two heads of Gypsy Broccoli (1.0#) and four heads of Packman Broccoli (2.0#) at 73 days from transplant.

Dec 4 – Thinned the carrots in Bed B, harvested 6.5# Danvers Half Long and 5.5# of Scarlet Nantes (77 days from seeding). Harvested two heads of Arcadia Broccoli (2.0#) and two heads of Gypsy Broccoli (2.0#).



Broccoli Bed A

Thinned Carrots Bed B

Danvers Half Long

Dec 6 – Harvested three Broccoli for Lettuce tasting trial. Arcadia (.6#), Gypsy (.75#), and Packman (.75#).

Dec 11 – Harvested five Arcadia heads (2.75#), two Gypsy Heads (1.0#), and two Packman side shoots at 84 days from transplant.



Broccoli Bed A

Carrots Bed B

Mixed Carrots

Dec 18 – Harvested two Packman Heads (1.25#) and two Arcadia Heads (2.75#) and some Gypsy side shoots. Harvested 2# of Mixed Carrots. Pack Man produced nice sized side shoots.



Broccoli Bed A

Carrots Bed B

Packman Harvest



Arcadia Harvest

Gypsy Harvest

2# Mixed Carrots

Dec 21 – Harvested one Arcadia Head and side shoots (0.75#) and Packman and Gypsy side shoots (0.25# each) at 94 days from transplant. Harvested 3.5# Danvers Half-Long Carrots.



Broccoli Bed A



Carrots Bed B



3.5# Danvers Half-Long

Dec 28 – Harvested side shoots from Broccoli plants: Arcadia (0.75#), Packman (0.75#), Gypsy (0.75#). Also harvested Scarlet Nantes Carrots (8.5#).



Arcadia



Packman



Gypsy



Scarlet Nantes

Jan 1 – Harvested 2.5# of Broccoli mostly Arcadia??

Jan 4 – Harvested 1.0# of Broccoli and Mixed Carrots (3.5#)



Broccoli Bed A



Broccoli Harvest



Carrot Bed B

Jan 8 – Harvested 1# Arcadia, 0.25# Packman, 0.5# Gypsy Broccoli, and 9# Danvers Half Long Carrots at 113 days from planting.



Arcadia



Gypsy



Packman



Danvers Half Long

Jan 11 – Harvested 1# Broccoli and 3# Mixed Carrots.



Broccoli

Mixed Carrots

Jan 15 – Harvested 0.25# Arcadia, 0.25# Packman, 0.25# Gypsy, and 11# Scarlet Nantes Carrots.



Arcadia

Gypsy

Packman

Scarlet Nantes

Jan 18 – Harvested 0.5# Broccoli and 11# Danvers Half Long. Pulled Broccoli plants from Bed A and composted (123 days from transplant).



Broccoli Bed A



Pulling spent plants



Clean Bed



Carrot Bed B



Danvers Half Long Carrots



Mixed Carrots

Jan 29 – Harvested 8.0# of Mixed Carrots and 30.5# of Scarlet Nantes Carrots at 134 days from transplant.



Carrots Bed B



Mixed Carrots



Scarlet Nantes Carrots

Feb 1 – Harvested 18.5# of Dantes Half Long Carrots. All carrots in Trial Bed B harvested at 137 days from seeding.



Empty Bed B



Danvers Half Long Carrots

Feb 12 – Harvested 2# of Mixed carrots. Some small carrots remain and will be harvested when they mature.

Conclusions

Broccoli: Packman produced first and yielded larger heads and side shoots. Arcadia produced the greatest weight and was least affected by frost and wind. Gypsy suffered a setback by losing four transplants to cutworms and the replacement plants never did as well as the original planting. I would suggest planting as recommended in early September, to provide shade cloth if the temperatures are high, but get the plants to full size before cold weather.

Carrots: Both varieties did well, Scarlet Nantes yielded the largest volume and better formed carrots. The mixed carrots were planted by broadcasting the seed so they were more crowded, even after thinning, so the carrot size was very inconsistent. Some of the Burpee A#1 hybrid rivaled the Scarlet Nantes in size.

HARVEST RECORD for 2018-2019 Broccoli and Carrot Trial

Date	Days from planting	Arcadia Head	Arcadia Wt	Gypsy Head	Gypsy Wt	Packman Head	Packman Wt	Danvers Half Long	Scarlet Nantes	Mixed Carrot
11/27	70					5	5.5			
11/30	73			2	1	4	2			
12/4	77	2	2	2	2			6.5	5.5	
12/6	79	1	0.6	1	0.75	1	0.75			
12/11	84	5	2.75	2	1		0.25			
12/18	91	2	2.75		0.25	2	1.25			2
12/21	94	1	0.75		0.25		0.25	3.5		
12/28	101		0.75		0.75		0.75		8.5	
1/1	105		2.5							
1/4	109		0.4		0.3		0.3			3.5
1/8	113		1		0.5		0.25	9		
1/11	116		0.4		0.3		0.3			3
1/15	120		0.25		0.25		0.25		11	
1/18	123		0.3		0.2			11		
1/29	134								30.9	8
2/1	137							18.5		
2/12	148									2
TOTAL		11	14.45	7	7.55	12	11.85	48.5	55.9	18.5

